```
!pip install reportlab
!pip install pdfminer.six
     Collecting reportlab
       Downloading reportlab-4.1.0-py3-none-any.whl (1.9 MB)
                                                         — 1.9/1.9 MB 7.0 MB/s eta 0:
     Requirement already satisfied: pillow>=9.0.0 in /usr/local/lib/python3.10/dist-
     Requirement already satisfied: chardet in /usr/local/lib/python3.10/dist-package
     Installing collected packages: reportlab
     Successfully installed reportlab-4.1.0
     Collecting pdfminer.six
       Downloading pdfminer.six-20231228-py3-none-any.whl (5.6 MB)
                                                          - 5.6/5.6 MB 25.3 MB/s eta 0
     Requirement already satisfied: charset-normalizer>=2.0.0 in /usr/local/lib/pyth
     Requirement already satisfied: cryptography>=36.0.0 in /usr/local/lib/python3.1
     Requirement already satisfied: cffi>=1.12 in /usr/local/lib/python3.10/dist-pac
     Requirement already satisfied: pycparser in /usr/local/lib/python3.10/dist-pack
     Installing collected packages: pdfminer.six
     Successfully installed pdfminer.six-20231228
from reportlab.lib.pagesizes import letter
from reportlab.pdfgen import canvas
def text_to_pdf(text, output_file):
   # Create a canvas with letter size
   c = canvas.Canvas(output_file, pagesize=letter)
   # Set up the font and size
   c.setFont("Helvetica", 12)
   # Split text into lines and write to the canvas
   lines = text.split('\n')
   y = 750 # Starting y position
   for line in lines:
       c.drawString(50, y, line)
       y -= 15 # Adjust vertical position for the next line
   # Save the canvas as a PDF file
   c.save()
# Example usage:
raw text = """
Chennai Super Kings (CSK) is an Indian professional cricket franchise based in Chennai, Tall
```

Chennai Super Kings (CSK) is an Indian professional cricket franchise based in Chennai, Tar The team was suspended for two years from the IPL starting July 2015 due to the involvemen BeacheseditMarina Beach is a 13-km-long urban beach along the Bay of Bengal that runs from

Elliot's Beach, also known as Besant Nagar beach begins where the Marina ends. The beach i Chennai Rail Museum a railway museum in Perambur which has a rich rail heritage of India w Valluvar Kottam is a popular monument in Chennai, dedicated to the classical Tamil poet, p Historic Government BuildingseditFort St. George is the name of the first British fortress considered as the largest mosque in the city of Chennai. ShoppingeditSpencer Plaza is one o Chennai has some unique places to offer for shopping. Art and crafts, contemporary and trade. Nagar, the neighbourhood is the shopping hub of the city. Two main areas are Pondy Bazar

```
There are four large amusement parks, MGM Dizzee World, VGP Universal Kingdom, Queen's Lan

"""

output_file = "output.pdf"
text_to_pdf(raw_text, output_file)

from pdfminer.high_level import extract_text
text=extract_text('output.pdf')
print(repr(text))
print(text)

e-joined IPL for the 2018 season and won the title in its comeback season. The t
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newspapers and periodicals published in India. The National Art Gallery buildin ly perforated hemispherical aluminium inner dome. It is located inside the Periy orld's 2nd oldest municipal corporation after the City of London Corporation. Th

```
import nltk
import numpy as np
import random
import string
nltk.download('punkt')
nltk.download('wordnet')
nltk.download('omw-1.4')
sentence_tokens=nltk.sent_tokenize(raw_text)
word_tokens=nltk.word_tokenize(raw_text)
lemmer=nltk.stem.WordNetLemmatizer()
def LemTokens(tokens):
    return [lemmer.lemmatize(token) for token in tokens]
remove_punct_dict=dict((ord(punct), None) for punct in string.punctuation)
def LemNormalize(text):
    return LemTokens(nltk.word_tokenize(text.lower().translate(remove_punct_dict)))
      [nltk_data] Downloading package punkt to /root/nltk_data...
      [nltk data]
                    Unzipping tokenizers/punkt.zip.
      [nltk_data] Downloading package wordnet to /root/nltk_data...
      [nltk_data] Downloading package omw-1.4 to /root/nltk_data...
greet_inputs=('hello','hi','whassup','namaste','kemchoo','how are you')
greet_responses=('hi','hey there',' i am fine', 'good','me too')
def greet(sentence):
    for word in sentence.split():
```

```
if word.lower() in greet_inputs:
           return random.choice(greet_responses)
from sklearn.feature_extraction.text import TfidfVectorizer
from sklearn.metrics.pairwise import cosine_similarity
def response(user_response):
    robot response= '
    TfidVec=TfidfVectorizer(tokenizer=LemNormalize,stop words='english')
    tfidf=TfidVec.fit_transform(sentence_tokens)
    vals=cosine_similarity(tfidf[-1],tfidf)
    idx=vals.argsort()[0][-2]
    flat=vals.flatten()
    flat.sort()
    req_tfidf=flat[-2]
    if(req_tfidf==0):
        robot_response=robot_response+ "I am sorry.Unable to understand!"
        return robot_response
    else:
        robot_response=robot_response+sentence_tokens[idx]
        return robot_response
flag = True
print("Hello I am retreivel learning chatbot please type your text after greeting to me fo
while(flag==True):
    user_response=input()
    user_response=user_response.lower()
    if(user_response!='bye'):
        if(user_response=='thank you' or user_response=='thanks'):
           flag=False
           print('Bot: You are welcome!')
        else:
           if(greet(user_response) !=None):
              print('Bot:' + greet(user_response))
           else:
               sentence_tokens.append(user_response)
              word_tokens=word_tokens+nltk.word_tokenize(user_response)
               final_words=list(set(word_tokens))
               print('Bot:',end='')
               print(response(user response))
               sentence_tokens.remove(user_response)
    else:
              flag = False
              print('Bot: Goodbye!')
     Hello I am retreivel learning chatbot please type your text after greeting to me
     Bot:/usr/local/lib/python3.10/dist-packages/sklearn/feature_extraction/text.py:
       warnings.warn(
     /usr/local/lib/python3.10/dist-packages/sklearn/feature_extraction/text.py:409:
       warnings.warn(
      Two main areas are Pondy Bazaar and Ranganathan Street which are home to severe
     There are four large amusement parks, MGM Dizzee World, VGP Universal Kingdom,
     Bot: considered as the largest mosque in the city of Chennai. Shoppingedit Spence
     Bot: Chennai has some unique places to offer for shopping.
     Bot:
```

Chennai Super Kings (CSK) is an Indian professional cricket	franchise	based in
Bot: Two main areas are Pondy Bazaar and Ranganathan Street		
There are four large amusement parks, MGM Dizzee World, VGP	Universal	Kingdom, (

Chennai Super Kings (CSK) is an Indian professional cricket franchise based in

Double-click (or enter) to edit

Bot: